

Clean Version:

1. A shared memory processor-to-processor mailbox between at least two processors, comprising:

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a shared memory accessible by a first processor and a second processor, said shared memory including a first mailbox portion to pass data from said first processor to said second processor, and a second mailbox portion to pass data from said second processor to said first processor, said first mailbox portion and said second mailbox portion being defined at least in part over common memory;

said first mailbox portion starting at a low physical address end of said shared memory, and addressably filling upward through to a highest physical address of said common memory;

said second mailbox portion starting at said high physical address end of said shared memory, and addressably filling downward through to said lowest physical address of said common memory; and

said first processor having write access to said first mailbox portion and not to said second mailbox portion.

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8. A method of utilizing a shared memory as a mailbox between two processors, comprising:

providing a contiguous block of shared memory;

allocating first direction messages passed from a first processor to a second processor to a first physical address end of said shared memory;

allocating second direction messages passed from said second processor to said first processor to a second physical address end of said shared memory opposite said first physical address end;

allowing said first direction messages to utilize a dynamically allocated shared central portion of said shared memory addressably filling through to said second physical address end; and

allowing said second direction messages to utilize said dynamically allocated shared central portion of said shared memory addressably filling through to said first physical address end.

13. Apparatus for utilizing a shared memory as a mailbox between two processors, comprising:

shared memory means for providing a contiguous block of shared memory;

means for allocating first direction messages passed from a first processor to a second processor to a first physical address end of said shared memory;

means for allocating second direction messages passed from said second processor to said first processor to a second physical address end of said shared memory opposite said first physical address end;

means for allowing said first direction messages to utilize a dynamically allocated shared central portion of said shared memory addressably filling through to said second physical address end; and

means for allowing said second direction messages to utilize said dynamically allocated shared central portion of said shared memory addressably filling through to said first physical address end.